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CURRICULUM VITAE

Education

Michigan State UniversityMIPh.D., Environmental Engineering2007 - 2013Nankai UniversityTianjin, ChinaM.S., Environmental Science2004 - 2007Nankai UniversityTianjin, ChinaB.S., Environmental Science2000 - 2004

Experiences

Postdoctoral fellow at Lawrence Berkeley National Lab

Research Assistant at MSU

Publications

Patent

• Jie Niu and S.L. Huang, Method for extracting graph image data information, Patent number: CN100412902 C, Application number: CN 200510013427 (2008/8/20)

Journal papers

- *Jie Niu* and M.S. Phanikumar, Modeling Watershed-Scale Solute Transport Using an Integrated, Process-Based Hydrologic Model with Applications to Bacterial Fate and Transport, *Journal of Hydrology* (in review, 2014)
- *Jie Niu*, C. Shen, S.G. Li and M.S. Phanikumar, Quantifying Storage Changes in Regional Great Lakes Watersheds Using a Coupled Subsurface Land Surface Process Model and GRACE, MODIS Products, *Water Resources Research*, 50, 7359-7377, doi: 10.1002/2014WR015589 (2014)
- C. Shen, *Jie Niu* and K. Fang, Quantifying the effects of data integration algorithms on the outcomes of a subsurface land surface processes model, *Environmental Modeling & Software*, 59, 146-161, doi: 10.1016/j.envsoft.2014.05.006 (2014)
- Reed M. Maxwell, Mario Putti, Steven Meyerhoff, Jens-Olaf Delfs, Ian M. Ferguson, Valeriy Ivanov, Jongho Kim, Olaf Kolditz, Stefan J. Koller, Mukesh Kumar, Sonya Lopez, *Jie Niu*, Claudio Paniconi, Young-Jin Park, Mantha S. Phanikumar, Chaopeng Shen, Edward A. Sudicky, Mauro Sulis, Surface-subsurface model intercomparison: A first set of benchmark results to diagnose integrated hydrology and feedbacks, *Water Resources Research*, 50(2), 1531-1549, doi: 10.1002/2013WR013725 (2014)
- C. Shen, Jie Niu and M.S. Phanikumar, Evaluating Controls on Coupled Hydrologic and

- Vegetation Dynamics in a Humid Continental Climate Watershed Using a Subsurface Land Surface Processes Model, *Water Resources Research*, doi: 10.1002/wrcc.20189 (2013)
- Itza Mendoza-Sanchez, Mantha S. Phanikumar, *Jie Niu*, Jason R. Masoner, Isabelle Cozzarelli and Jennifer T. McGuire, Quantifying Wetland-Aquifer Interactions in a Humid Subtropical Climate Region: An Integrated Approach, *Journal of Hydrology*, vol. 498, pp. 237-253, doi: 10.1016/j.jhydrol.2013.06.022 (2013)
- C. Shen, *Jie Niu*, E.J. Anderson and M.S. Phanikumar, Estimating Longitudinal Dispersion in Rivers Using Acoustic Doppler Current Profilers, *Advances in Water Resources*, 33(6), pp. 615-623, doi: 10.1016/j.advwatres.2010.02.008 (2010)

Conference papers

- *Jie Niu*, C. Shen, W.J. Riley, J. Melack and G. Bisht, Quantifying Water Budgets in Amazonian Watershed Using a coupled Subsurface Land Surface Process Model, AGU annual Fall Meeting, San Francisco, CA. Poster: H13E-1161 (Session: Advances in Representation, Integration, and Coupling of Novel Processes in Hydrologic and Transdisciplinary Models) (Dec. 2014)
- Jie Niu, C. Shen and M.S. Phanikumar, Quantifying Water Budgets in Regional Great Lakes Watersheds Using a Process-Based, Distributed Hydrologic Model, International Association for Great Lakes Research Annual Conference, Duluth, MN (May 30 June 3, 2011) PA-14 (Session: Assessing Dynamics of the Great Lakes Water Budget)
- *Jie Niu* and M.S. Phanikumar, Modeling Bacterial Fate and Transport in a Great Lakes Watershed using a Process-based, Integrated Hydrologic Model, AGU 45th annual Fall Meeting, San Francisco, CA. Poster: H51I-1468 (Session: Recent Advances in Understanding the Hydrology of the Great Lakes Region) (Dec. 2012)